

IN THE CLAIMS

Claim 1. (Original) An isolated polynucleotide that comprises a sequence that encodes a reverse transcriptase polypeptide or a fragment of a reverse transcriptase polypeptide, wherein the reverse transcriptase polypeptide comprises a sequence having 88% identity to either SEQ ID NO:1 or SEQ ID NO:2.

Claim 2. (Original) The isolated polynucleotide of claim 1 wherein the polynucleotide utilizes a universal genetic code.

Claim 3. (Original) The isolated polynucleotide of claim 1 wherein the polynucleotide comprises a sequence set forth in SEQ ID NO:3 or SEQ ID NO:4.

Claim 4. (Original) The isolated polynucleotide of claim 3, wherein the polynucleotide comprises a sequence as set forth in SEQ ID NO:3.

Claim 5. (Cancelled)

Claim 6. The isolated polynucleotide of claim 4, wherein the polynucleotide consists essentially of a sequence as set forth in SEQ ID NO:3.

Claim 7. (Cancelled)

Claim 8. A recombinant vector comprising a polynucleotide sequence selected from the group consisting of SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5 and SEQ ID NO:6.

Claim 9. The recombinant vector of claim 8 wherein the polynucleotide is operably linked to a heterologous promoter.

Claim 10. The recombinant vector of claim 9 wherein the heterologous promoter is selected from the group consisting of CMV promoter, alcohol dehydrogenase promoter, T7 promoter, lactose-inducible promoter, heat shock promoter, temperature-inducible promoters, and tetracycline-inducible promoter.

Claim 11. A cell comprising an isolated polynucleotide that encodes a pFOXC-RT having a sequence that is at least 88% identical to SEQ ID NO:1 or SEQ ID NO:2.

Claim 12. The cell of claim 11 wherein the cell is selected from the group consisting of mammalian cell, mammary gland cell, plant cell, bacterial cell, yeast cell, a bacterium.

Claim 13. The cell of claim 11 wherein the cell is an Escherichia coli.

Claim 14. The cell of claim 11, wherein the cell is a Saccharomyces cerevisiae.

Claim 15. A method of making a pFOXC-RT reverse transcriptase polypeptide comprising expressing in a heterologous protein expression system an isolated polynucleotide selected from the group consisting of SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, and SEQ ID NO:6, wherein a pFOXC-RT is produced, and the pFOXC-RT is isolated from the heterologous system.

Claim 16. The method of claim 15 wherein the heterologous protein expression system comprises an Escherichia coli bacterial cell.

Claim 17. (Cancelled)

Claim 18. (Cancelled)

Claim 19. (Cancelled)

Claim 20. (Cancelled)

Claim 21. (Cancelled)

Claim 22. (Cancelled)